

FOUR PHLAEOTHIRIPIDAE (THYSANOPTERA) FALSELY RECORDED AS AUSTRALIAN

LAURENCE A. MOUND

CSIRO Ecosystem Sciences, PO Box 1700, Canberra, ACT 2601
(Email: laurence.mound@csiro.au)

Abstract

Four species of phlaeothripid thrips described as having been collected in Queensland by the 1910 Mjöberg Expedition are here considered to have been based on specimens collected in South Africa. Two are recognisable as South African species but the identity of the other two remains in doubt. One new synonym is established.

Introduction

One of the basic contributions to our knowledge of the Australian Thysanoptera fauna derives from the Mjöberg expedition during the years 1910-1913. In summarising the collections of Thysanoptera made during that expedition, Karny (1924) provided the first checklist of thrips known from Australia. That list included 104 species-group names, 29 of which previously had been described very briefly in a paper that included no mention of the specimens on which the descriptions were based (Karny 1920). Specimen details and more extensive descriptions were provided in the 1924 paper, although that bears the date December 1920 at the end of the author's Introduction. However, Karny stated in the 1924 paper that in October 1923, before the paper was sent for publication, he received a further parcel of specimens from Stockholm Museum, and from these he included in the paper seven further new species. He referred to these specimens as 'eine Nachtragssendung' (literal translation: 'a subsequent transmission').

The locality data provided for three of the seven species described in Karny's 1924 paper were: 'Queensland, Glen Lamington, November', for *Gryplothrips mantis* Karny and *Cryptothrips rhopaloides* Karny; and 'Queensland, Mt Tambourine', for *Cryptothrips additamentus* Karny. All three of these can be recognised from recent collections as Australian insects (Crespi *et al.* 2004, Mound 1974, Mound 2008). However, the identity and provenance of the other four species (*Ophthalmothrips conocephalus* Karny, *Gigantothrips nigripes* Karny, *Liothrips pallicornis* Karny and *L. priesneri* Karny) has remained less clear. For each of these species, Karny stated that it was found in the Nachtragssendung without any data apart from 'Queensland'. Extensive studies in recent years on the Queensland Thysanoptera fauna have failed to rediscover any of these four species. However, two of them, *Ophthalmothrips conocephalus* and *Gigantothrips nigripes*, are now recognised as being South African species, while the other two are placed in *Liothrips* Uzel, the largest genus of Thysanoptera, and cannot be identified securely at present. It seems likely that all four were collected in South Africa in the vicinity of Durban or Port St John, when the boat transporting the expedition put into port during the return voyage to Europe from Australia.

The purpose of this article is to propose that all four species be deleted from the Australian list.

Abbreviations used are: BMNH – Natural History Museum, London; SMNH – Swedish Museum of Natural History, Stockholm.

Details of falsely recorded species

Ophthalmothrips conocephalus (Karny)

Pyrgothrips conocephalus Karny, 1924: 36.

Fulgorothesis priesneri Faure, 1933: 63. Synonymised by Mound 1974: 90.

The description of *O. conocephalus* was based on one male with the data 'aus Queensland, ohne sonstige Angaben' (from Queensland, without other data). This specimen (in SMNH) has been compared with South African specimens (in BMNH) from Pondoland (Port St John), Natal and Transvaal, together with type material of *Fulgorothesis priesneri* Faure from Natal. These two names are considered to represent the same species but, because of taxonomic problems in the genus, all 10 of the species-group names in *Ophthalmothrips* Hood were listed separately by Mound and Palmer (1983). The taxonomy of these, often wingless, species that feed on fungal spores at the base of grasses is difficult, due to the absence of studies on intra- and inter-population variation. Currently, 11 species are listed in the genus, four from southern Africa, two from Japan, two from India and three from China and Taiwan.

Gigantothrips nigripes Karny

Gigantothrips nigripes Karny, 1924: 34.

Gigantothrips turneri Bagnall, 1926: 559; **syn. n.**

The original description stated that this species was found in 'der Nachtragssendung: Queensland, ohne sonstige Angaben', but does not indicate how many specimens were available. One male and two female syntypes (in SMNH) have been compared with the type female and co-type male of *G. turneri* Bagnall (in BMNH) from Port St John, South Africa. These two are here considered to represent the same species. *Gigantothrips nigripes* has also been compared with specimens of *G. marshalli* Bagnall. However, that has the pronotal posteroangular setae as stout as the epimeral pair, a condition that also occurs in *G. micrurus* Bagnall from Benin and *G. vuilleti* Bagnall from Mali. In contrast, *G. nigripes* has the pronotal posteroangular setae small and weak, a condition that also occurs in *G. modestus* Priesner from Uganda. Nine species of *Gigantothrips* Zimmerman are listed from Africa and Madagascar (Mound 2011) and an identification key to six of these was provided by Mound (1968). However, most of them are known from very few specimens and the validity of some names remains in doubt. The species probably form colonies on the leaves of *Ficus* trees.

***Liothrips pallicornis* (Karny)**

Adiaphorothrips pallicornis Karny, 1924: 33.

Akainothrips pallicornis (Karny); Palmer and Mound 1978: 186.

Known from a single male (in SMNH), of which the locality data were 'aus Queensland, ohne sonstige Angaben'. The specimen is large, about 3200 microns long, with antennae typical of species in the *Liothrips* lineage – one sensorium on segment III and three on IV. Although referred to the genus *Liothrips* by Crespi *et al.* (2004), this generic placement is by no means satisfactory. Typical species of this genus have the metathoracic sternopleural sutures present, but these sutures are not developed in *L. pallicornis*. Moreover, in *L. pallicornis* the head bears a row of about eight equally large setae on the cheeks and sternite VIII bears a large oval pore plate; neither of these character states occurs in other species of the genus *Liothrips*. Tergite IX setal pair S2 are short, stout and pointed, the mesopraesternum broadly boat-shaped and the pronotal ml, epim and pa setae are all about 150 microns long, in contrast to the am and aa setae that are less than half as long. All the major setae are acute, although no postocular setae are visible, and the metanotum is almost striate medially, with narrow elongate reticulation.

***Liothrips priesneri* Karny**

Liothrips priesneri Karny, 1924: 22.

This species is known from a single crushed female (in SMNH) and the original data included the statement 'aus Queensland, ohne sonstige nähere Angaben'. The metanotum is almost striate, in contrast to the typically reticulate area of most species in the genus *Liothrips*, but *L. priesneri* is likely to remain unrecognisable.

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